REMARKS

This Amendment is in response to the non-final Office action (Paper No. 20080830) mailed on 3 September 2008. Reexamination and reconsideration are respectfully requested.

Listing of The Claims

Pursuant to 37 CFR §121(c), the claim listing, including the text of the claims, will serve to replace all prior versions of the claims, in the application.

Status of The Claims

Claims 1-24 are pending in this application.

Amendment of The Claims

Claims 2, 3, 8, 9, 19 and 20 are amended.

Issues Raised by Paper No. 20080830

Claim Rejections 35 USC § 103

I.   Claims 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suda (U.S.Pat-6122518) in view of Ihara et al. (U.S.Pat-6366773), and further in view of Basu et al. (US.Pat-6219539).

I-1.   The present invention relates to a method for performing a call processing operation to manage state information of ANs (Access Nodes). According to the method, when an access node coupled to a wireless private network makes a request for a call connection with another access node coupled

to the wireless private network, a call connection is carried out to provide a high-speed wireless data service for the access nodes, and state information of the access nodes is updated to indicate that the access nodes are busy. On the other hand, when the high-speed wireless data service for the access nodes is completed, a call connection release is carried out, and the state information of the access nodes is updated to indicate that the access nodes are idle. In addition, when a public network requests the state information of the access nodes, the state information is transmitted to the public network. In this way, the public network can identify the states of subscribers of the private network located within a cell shared between the public and private networks, and thus a public/private mobile communication service can be quickly and smoothly provided.

Suda '518 relates to a mobile communication system including a switching network and at least one base station operatively connected to the switching network. The base station has a definite number of traffic channels, and a memory stores information regarding whether each of the traffic channels is non-free, a data-free or speech-free. A control unit compares information transfer capability included in a call set-up message from one mobile station or to the mobile station with the information of the memory and sets up a call connection between the mobile station and one of the traffic channels in accordance with the result of the comparison. Suda '518 does not teach or

suggest busy/idle state of the mobile stations, updating the busy/idle state of the mobile stations, or transmitting the busy/idle state of the mobile stations to the public network.

Ihara '773 relates to a radio terminal operation data write method in a private mobile communication system including a multi-node PBX having a plurality of node exchanges connected to each other through a high-speed data line. A node exchange to which a maintenance terminal is connected specifies a registration node exchange of a radio terminal from a logical extension number which is unique within the multi-node PBX and added to the radio terminal, acquires information on a current location area node exchange of the radio terminal through the high-speed data line, and requests the current location area node exchange to write terminal operation data on the radio terminal. The current location area node exchange acquires termination operation data on the radio terminal from the registration node exchange through the high-speed data line in accordance with the logical extension number and writes the terminal operation data. Although Ihara '773 mentions "available/busy information" of the radio terminals, Ihara '773 fails to teach or suggest updating the available/busy information of the radio terminals, or transmitting the available/busy information of the radio terminals to the public network.

Basu '539 discloses a dual mode mobile station operable to selectively communicate in CDMA and analog modes, and a home base station including circuitry

for establishing wireless communication with mobile station in the analog mode, and circuitry for establishing communication with a wireline communication system, the base station thereby allowing an exchange of information between the mobile station and the wireline system in the analog mode.

Lu '813 relates to a cellular private branch exchange for facilitating cellular communication for a first plurality of mobile station units, which includes a first base station subsystem for communicating with a first and a second mobile station unit of the first plurality of mobile station units on respectively a first and a second cellular bearer data channel. The cellular private branch exchange further includes a cellular private branch exchange unit coupled to the first base station subsystem. In turn, the cellular private branch exchange unit includes a private mobile-services switching center for providing mobility management for the first plurality of mobile station units, the private mobile-services switching center representing a first cross-connect node capable of cross-connecting the first bearer data channel with the second bearer data channel for calls between the first and the second mobile station units. Further the cellular private branch exchange unit includes a private registry coupled to the private mobile-services switching center, the private registry storing subscriber information pertaining to the first plurality of mobile station units. Lu '813 does not teach or suggest busy/idle state of the mobile stations, updating

the busy/idle state of the mobile stations, or transmitting the busy/idle state of the mobile stations to the public network.

The primary difference between the pending claims and the combined prior art is that in the pending claims, the busy/idle state information of the access nodes are updated whenever the call connection is carried out and the connection release is carried out, while the combined prior art does not teach or suggest when or how to update the state information of the access nodes. Therefore, in the present invention in the pending claims, the state information of the mobile stations is always updated. See selected passages of the pending claims:

> *claim 1*, "updating state information of the access nodes according to the call connection and connection release between the access nodes, the state information indicating an idle state or a busy state of the access nodes";

> *claim 2*, "when an access node coupled to a wireless private network makes a request for a call connection with another access node coupled to the wireless private network, carrying out a call connection between the access nodes and providing a high-speed wireless data service for the access nodes, and updating state information of the access nodes to busy state information; when the high-speed wireless data service for the access nodes is completed, carrying out a call connection release, and updating the state information of the access nodes to idle state information according to the call connection release";

> *claim 3*, "when an access node coupled to a wireless private network makes a request for a call connection with another access node coupled to the wireless private network, allowing a private access network controller to carry out a call connection between the access nodes and to provide a high-speed wireless data service for the access nodes,

allowing the private access network controller to request that state information of the access nodes be updated, and allowing a data location register to update the state information of the access nodes to busy state information according to a state information update request; when the high-speed wireless data service for the access nodes is completed, carrying out a call connection release between the access nodes, allowing the private access network controller to request that the state information of the access nodes be updated, allowing the data location register to update the state information of the access nodes to idle state information according to another state information update request";

claim 8, "a private access network controller carrying out a call connection between the access nodes to provide data service for the first and second access nodes when the first access node coupled to the first network service makes a request for a call connection with the second access node coupled to the second network service, and requesting state information of the first and second access nodes to be updated, with the state information indicating an idle state or a busy state of the access nodes";

claim 18, "when an access node coupled to a wireless private network makes a request for a call connection with another access node coupled to the wireless private network, carrying out a call connection between the access nodes, providing a high-speed wireless data service for the access nodes, carrying out a call connection release after completing the high-speed wireless data service, and updating state information of the access nodes according to the call connection and connection release between the access nodes, the state information indicating an idle state or a busy state of the access nodes";

claim 19, "when an access node coupled to a wireless private network makes a request for a call connection with another access node coupled to the wireless private network, carrying out a call connection between the access nodes to provide a high-speed wireless data service for the access nodes, and updating state information of the access nodes to busy state information; when the high-speed wireless data

service for the access nodes is completed, carrying out a call connection release, and updating the state information of the access nodes to idle state information according to the call connection release"; and

claim 20, "a first field containing data representing when an access node coupled to a wireless private network makes a request for a call connection with another access node coupled to the wireless private network, allowing a private access network controller to carry out a call connection between the access nodes and to provide a high-speed wireless data service for the access nodes, allowing the private access network controller to request that state information of the access nodes be updated, and allowing a data location register to update the state information of the access nodes to busy state information according to a state information update request; a second field containing data representing when the high-speed wireless data service for the access nodes is completed, carrying out a call connection release between the access nodes, allowing the private access network controller to request that the state information of the access nodes be updated, and allowing the data location register to update the state information of the access nodes to idle state information according to another state information update request".

Another difference between the pending claims and the combined prior art is that in the pending claims, the busy/idle state information of the access nodes are transmitted to the public network whenever the public network requests for the state information of the access nodes, while the combined prior art does not teach or suggest the public network requests for the busy/idle state information of the access nodes and the requested state information is transmitted to the public network. See selected passages of the pending claims:

claim 1, "transmitting the state information of the access nodes to a public network in response to a request for

the state information of the access nodes by the public network";

claim 2, "transmitting the state information of the access nodes to the public network in response to a public network requesting the state information of the access nodes";

claim 3, "allowing the data location register to transmit the state information of the access nodes to a public network in response to a request for the state information of the access nodes by the public network";

claim 8, "a data location register transmitting at least one of the state information of the first access node and the state information of the second access node to a public network in response to a request for the state information of the access nodes by the public network";

claim 18, "transmitting the state information of the access nodes to a public network in response to a request for the state information of the access nodes by the public network";

claim 19, "transmitting the state information of the access nodes to the public network in response to a public network requesting the state information of the access nodes"; and

claim 20, "allowing the data location register to transmit the state information of the access nodes to a public network in response to a request for the state information of the access nodes by the public network".

I-2. **Claim 8**

a. Regarding claim 8, on page 3 of Paper No. 20080830, the Examiner

stated:

"(Suda teaches) a private access network controller (fig.1, control unit 4, switching network 1, control unit 4,

memory 5) carrying out a call connection between the access nodes (col.3, lines 29) and to provide data service for the first and second access nodes (col.2, line 52 to col.3, line 14) when the first access node makes a request for a call connection with the second access node coupled to the first network service (col.2, line 52 to col.3, line 14) and the private access network controller requesting state information of the first and second access nodes to be updated (fig. 4-8d, col.3, lines 1-47), the state information indicating an idle state or a busy state of the access nodes (fig. 4, col.3, lines 1-10)."

Applicant respectfully traverses because the combination of Suda '518, Ihara '773 and Basu '539 fails to teach or suggest claim 8's "the private access network controller requesting the busy/idle state information of the access nodes to be updated".

The pending claim 8 calls for, in part,

"a private access network controller ...... requesting state information of the first and second access nodes to be updated, with the state information indicating an idle state or a busy state of the access nodes".

According to the pending claim 8, the private access network controller requests the busy/idle state information of the access nodes to be updated.

In Paper No. 20080830, the Examiner holds that Suda '518's control unit 4 corresponds to the pending claim's "private access network controller". But Suda '518 merely mentions that control unit 4 controls network 1 to carry out call control connection in accordance with the content of memory 5. There is no teaching in Suda '518 suggesting that control unit 4 requests to update the content of memory 5.

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In addition, Suda '518's "vacant/occupied state information of the traffic channels" is not synonymous with the claim 8's "busy/idle state information of the access nodes". In the pending claim 8, the state information corresponds to each of the access nodes, and indicates whether the corresponding access node is busy or idle. On the other hand, Suda '518's state information as illustrated in Suda '518's FIG. 4 corresponds to each of the traffic channels CH1, CH2 and CH3, and indicates whether the corresponding channel is occupied or vacant.[1] Note that there is no fixed relationship between Suda '518's "traffic channel" and Suda '518's "mobile station". In other words, Suda '518's traffic channel CH1 can be occupied by either one of mobile stations 6-1, 6-2, 6-3 and 6-4. In one example as shown in Suda '518's FIG. 6D, the channel CH3 is occupied by the mobile station 6-4.[2] Therefore, Suda '518's "traffic channel" is not synonymous with Applicant's "access node". Consequently, Suda '518's "state information of the traffic channel" is not synonymous with Applicant's "state information of the access node".

Note that Ihara '773 was not cited in this regard, and a thorough search of Ihara '773 demonstrates that although Ihara '773 mentions "available/busy

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[1] Suda '518's column 3, lines 9-10 reads: "Further, the memory 5 stores an occupied or vacant state of each of the **channels**."

[2] Suda '518's column 4, lines 30-32 reads: "Thus, as shown in FIG. 6D, the channel **CH3** of the PHS base station 2-1 is occupied by the mobile station **6-4**."

information of the radio terminals",[3] Ihara '773 does not teach or suggest any private access network controller for requesting the "available/busy information of the radio terminals" to be updated.

In addition, Basu '539 was not cited in this regard either, and a thorough search of Basu '539 demonstrates that Basu '539 does not teach or suggest any "state information of the mobile stations", or "a private access network controller for requesting the state information of the mobile stations to be updated".

Therefore, the rejection of claim 8 is in error and should be withdrawn.

b.   Regarding claim 8, on page 4 of Paper No. 20080830, the Examiner stated:

> "Suda and Ihara fail to specifically disclose a data location register transmitting the state information of the access nodes to a public network in response to a request for the state information of the access nodes by the public network. However, Basu teaches a data location register transmitting the state information of the access nodes to a public network in response to a request for the state information of the access nodes by the public network (fig.1 and 50, col.13, lines 10-14 and 22-33). Therefore, it would have been obvious to one having ordinary skill in the art at the time invention was made to apply to teaching of Basu to Suda and Ihara to provide a method for implementing a

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[3] Ihara '773's column 11, lines 17-22 reads: "each node exchange includes a local database module LDM 500 storing information unique to each node exchange and a current information memory MEM 400 as a memory to be used for call processing for position registration information on the radio terminal 103, **available/busy information**, and the like."

private wireless communication system while still maintaining the availability of technology."

Applicant respectfully traverses because the combination of Suda '518, Ihara '773 and Basu '539 fails to teach or suggest claim 8's "a data location register transmitting the busy/idle state information of the access nodes to a public network requesting for the busy/idle state information of the access nodes".

The pending claim 8 calls for, in part,

> "a data location register transmitting at least one of the state information of the first access node and the state information of the second access node to a public network in response to a request for the state information of the access nodes by the public network".

According to the pending claim 8, when the public network requests the data location register for the busy/idle information of the access nodes, the data location register transmits the busy/idle information of the access nodes to the public network.

Basu et al discloses a dual mode mobile station operable to selectively communicate in CDMA and analog modes, and a home base station including circuitry for establishing wireless communication with mobile station in the analog mode, and circuitry for establishing communication with a wireline communication system, the base station thereby allowing an exchange of information between the mobile station and the wireline system in the analog mode.

After a review of Figures 1 and 5D, and lines 10-23 of column 13 of Basu '539 cited by the Examiner, Applicant respectfully submits that Basu '539 merely discloses that if HLR 108 receives an incoming call, HLR 108 receives a PSTN number identifying the local exchange and a PB number identifying home base station 103, thereby connecting with local exchange and transferring the incoming call to the target mobile station through the home base station.

In other words, Basu '539 merely discloses, when an incoming call occurs, obtaining information on the local exchange of the network and the home base station. But Basu '539 does not disclose or suggest claim 8's "data location register that provides state information of each access node corresponding to call connection or call release between two access nodes which perform communication through private network, to a public network in response to a request by the public network".

In addition, respectfully, where is the pending claim's "a request for the state information of the access nodes", or "a data location register transmitting the state information of the access nodes"? Basu '539 merely teaches that home location register (HLR) 108 transmits a connection request to authorization and call routing equipment (ACRE) 107, and ACRE 107 returns a transmission line identification number (TLDN) to HLR 108. As defined in Basu '539, the transmission line identification number (TLDN) includes a public switched telephone network (PSTN) number identifying the local exchange and a PB

number identifying the home base station.[4] Applicant cannot find any relationship between Basu '539's "transmission line identification number (TLDN)" and the pending claim's "busy/idle state information of the access nodes". Therefore, Basu '539's "connection request" is not synonymous with Applicant's "request for the station information of the access nodes", and Basu '539's "transmission line identification number (TLDN)" is not synonymous with Applicant's "busy/idle information of the access nodes".

Therefore, the rejection of claim 8 is in error and should be withdrawn.

I-3.   Claim 9

Regarding claim 9, on page 4 of Paper No. 20080830, the Examiner stated:

> "Regarding claim 9, Suda, Ihara, and Basu further teach the system of claim 8, further comprising a data location register updating the state information of the access nodes to busy state information according to a state information update request (see Suda, fig. 4-8d, col.3, lines 1-14)."

Applicant respectfully traverses because the combination of Suda '518, Ihara '773 and Basu '539 fails to teach or suggest claim 9's "a data location register updating the state information of the access nodes to busy state".

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[4] Basu '539's column 13, lines 14-19 reads: "If the target mobile station is registered, a connection request is passed onto ACRE 107. ACRE 107 duly returns a transmission line identification number (TLDN) including a **PSTN number** identifying the local exchange and a PB number identifying the home base station 103 to HLR 108 ultimately originating network."

As discussed previously, Suda '518's "vacant/occupied state information of the traffic channels" is not synonymous with the claim 9's "busy/idle state information of the access nodes". Although Ihara '773 mentions "available/busy information of the radio terminals", Ihara '773 does not teach or suggest any data location register for updating the "state information of the radio terminals". In addition, Basu '539 does not teach or suggest any "state information of the mobile stations", or "a data location register for updating the state information of the mobile stations".

Therefore, the rejection of claim 9 is in error and should be withdrawn.

II.   Claims 1-4, 10-15, and 18-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suda (U.S.Pat-6122518) in view of Basu et al. (U.S.Pat-6219539) further in view of Lu et al. (U.S.Pat-5999813).

II-1.   Claim 1

a.   Regarding claim 1, on page 5 of Paper No. 20080830, the Examiner stated:

> "(Suda teaches) updating state information of the access nodes according to the call connection (fig.4-8d, col.3, lines 1-47) and connection release between the access nodes (not show), the state information indicating an idle state or a busy state of the access nodes (fig.4, col.3, lines 1-10)."

Applicant respectfully traverses.

As discussed previously, Suda '518's "vacant/occupied state information of the traffic channels" is not synonymous with the claim 1's "busy/idle state information of the access nodes" because Suda '518's "traffic channel" does not correspond to the "radio terminal". Consequently, Suda '518 fails to teach or suggest the pending claim's "updating the state information of the access nodes according to the call connection and connection release between the access nodes".

Note that both of Basu '539 and Lu '813 were not cited in the regard.

Therefore, the rejection of claim 1 is in error and should be withdrawn.

b.   Regarding claim 1, on page 5 of Paper No. 20080830, the Examiner stated:

> "Suda fails to specifically disclose transmitting the state information of the access nodes to a public network in response to a request for the state information of the access nodes by the public network. However, Basu teaches transmitting the state information of the access nodes to a public network in response to a request for the state information of the access nodes by the public network (fig.1 and 5D, col.13, lines 10-14 and 22-33). Therefore, it would have been obvious to one having ordinary skill in the art at the time invention was made to apply to teaching of Basu to Suda to provide a method for implementing a private wireless communication system while still maintaining the availability of technology."

Applicant respectfully traverses.

As discussed previously, Basu '539 fails to teach or suggest the pending claim's "transmitting the state information of the access nodes to a public network in response to a request by the public network". Basu '539 merely teaches that home location register (HLR) 108 transmits a connection request to authorization and call routing equipment (ACRE) 107, and ACRE 107 returns a transmission line identification number (TLDN) to HLR 108. As defined in Basu '539, the transmission line identification number (TLDN) includes a public switched telephone network (PSTN) number identifying the local exchange and a PB number identifying the home base station. Apparently, Basu '539's "transmission line identification number (TLDN)" is not synonymous with the pending claim's "busy/idle state information of the access nodes". And there is no teaching in Basu '539 suggesting that Basu '539's "connection request" requests the "busy/idle state information of the access nodes".

Note that both of Suda 518 and Lu '813 were not cited in the regard.

Therefore, the rejection of claim 1 is in error and should be withdrawn.

II-2. Claim 2

a.   Regarding claim 2, on pages 6-7 of Paper No. 20080830, the Examiner stated:

> "(Suda teaches) when an access node (fig.1, mobile stations 6-1, PHS base stations 2-1) coupled to a wireless private network makes a request for a call connection with another access node (col.3, lines 11-29) coupled to the wireless private network (fig.1, control unit 4, switching

network 1, col.2, lines 52-58, col.3, lines 11-14), carrying
out a call connection between the access nodes (col.3, lines
11-29) and providing a high-speed (not show) wireless data
service for the access nodes (abstract, col.1, lines 26-34);
          updating state information of the access nodes to busy
state information (figA-8d, col.3, lines 1-47); and
          when the high-speed (not show) wireless data service
for the access nodes is
          completed (col.1, lines 26-34), carrying out a call
connection release (not show);
          updating the state information of the access nodes to
idle state information according to the call connection
release (not show) (figA-8d, col.3, lines 1-47)."

Applicant respectfully traverses.

As discussed previously, Suda '518's "vacant/occupied state information
of the traffic channels" is not synonymous with the claim 2's "busy/idle state
information of the access nodes" because Suda '518's "traffic channel" does not
correspond to the "radio terminal". Consequently, Suda '518 fails to teach or
suggest the pending claim's "updating the state information of the access nodes
to busy state information when a call connection is carried out between the
access nodes", and "updating the state information of the access nodes to idle
state information when a call connection is released".

Note that both of Basu '539 and Lu '813 were not cited in the regard.

Therefore, the rejection of claim 2 is in error and should be withdrawn.

b.   Regarding claim 2, on page 7 of Paper No. 20080830, the Examiner
stated:

"Suda fails to specifically disclose transmitting the state information of the access nodes to a public network in response to a request for the state information of the access nodes by the public network. However, Basu teaches transmitting the state information of the access nodes to a public network in response to a request for the state information of the access nodes by the public network (fig.1 and 5D, col.13, lines 10-14 and 22-33). Therefore, it would have been obvious to one having ordinary skill in the art at the time invention was made to apply to teaching of Basu to Suda to provide a method for implementing a private wireless communication system while still maintaining the availability of technology."

Applicant respectfully traverses.

As discussed previously, Basu '539 fails to teach or suggest the pending claim's "transmitting the state information of the access nodes to a public network in response to a request by the public network", because Basu '539's "transmission line identification number (TLDN)" is not synonymous with the pending claim's "busy/idle state information of the access nodes", and Basu '539's "connection request" is synonymous with the "request for the busy/idle state information of the access nodes".

Note that both of Suda 518 and Lu '813 were not cited in the regard.

Therefore, the rejection of claim 2 is in error and should be withdrawn.

II-3. Claim 3

a.   Regarding claim 3, on pages 8-9 of Paper No. 20080830, the Examiner stated:

"(Suda teaches) when an access node (fig. 1, mobile stations 6-1, PHS base stations 2-1) coupled to a wireless private network makes a request for a call connection with another access node (col.3, lines 11-29) coupled to the wireless private network (fig.1, control unit 4, switching network 1, col.2, lines 52-58, col.3, lines 11-14), allowing a private access network controller to carry out a call connection between the access nodes (col.3, lines 11-29) and to provide a high-speed (not show) wireless data service for the access nodes (abstract, col.1, lines 26-34);

allowing the private access network controller to request that state information of the access nodes be updated (fig. 4-8d, col.3, lines 1-47);

allowing a data location register to update the state information of the access nodes to busy state information according to a state information update request (fig. 4-8d, col.3, lines 1-47);

when the high-speed (not show) wireless data service for the access nodes is

completed (col.1, lines 26-34), carrying out a call connection release between the access nodes (not show) and allowing the private access network controller to request that the state information of the access nodes be updated (fig. 4-8d, col.3, lines 1-47); and

allowing the data location register to update the state information of the access nodes to idle state information according to another state information update request (fig. 4-8d, col.3, lines 1-47)."

Applicant respectfully traverses.

As discussed previously, Suda '518's "vacant/occupied state information of the traffic channels" is not synonymous with the claim 3's "busy/idle state information of the access nodes" because Suda '518's "traffic channel" does not correspond to the "radio terminal". Consequently, Suda '518 fails to teach or suggest the pending claim's "the private access network controller request to update the state information of the access nodes to busy state information when a

call connection is carried out between the access nodes", and "the private access

network controller request to update the state information of the access nodes to

idle state information when a call connection is released".

Note that both of Basu '539 and Lu '813 were not cited in the regard.

Therefore, the rejection of claim 3 is in error and should be withdrawn.

b. Regarding claim 3, on page 9 of Paper No. 20080830, the Examiner

stated:

> "Suda fails to specifically disclose transmitting the state information of the access nodes to a public network in response to a request for the state information of the access nodes by the public network. However, Basu teaches transmitting the state information of the access nodes to a public network in response to a request for the state information of the access nodes by the public network (fig.1 and 5D, col.13, lines 10-14 and 22-33). Therefore, it would have been obvious to one having ordinary skill in the art at the time invention was made to apply to teaching of Basu to Suda to provide a method for implementing a private wireless communication system while still maintaining the availability of technology."

Applicant respectfully traverses.

As discussed previously, Basu '539 fails to teach or suggest the pending

claim's "the data location register transmitting the state information of the access

nodes to a public network in response to a request by the public network",

because Basu '539's "transmission line identification number (TLDN)" is not

synonymous with the pending claim's "busy/idle state information of the access

nodes", and Basu '539's "connection request" is synonymous with the "request

for the busy/idle state information of the access nodes".

Note that both of Suda 518 and Lu '813 were not cited in the regard.

Therefore, the rejection of claim 3 is in error and should be withdrawn.

II-4.   Claim 18

a.   Regarding claim 18, on page 12 of Paper No. 20080830, the

Examiner stated:

> "(Suda teaches) updating state information of the
> access nodes according to the call connection (fig.4-8d,
> col.3, lines 1-47) and connection release between the access
> nodes (not show), the state information indicating an idle
> state or a busy state of the access nodes (fig.4, col.3, lines 1-
> 10)."

Applicant respectfully traverses.

As discussed previously, Suda '518's "vacant/occupied state information

of the traffic channels" is not synonymous with the claim 18's "busy/idle state

information of the access nodes" because Suda '518's "traffic channel" does not

correspond to the "radio terminal". Consequently, Suda '518 fails to teach or

suggest the pending claim's "updating the state information of the access nodes

according to the call connection and connection release between the access

nodes".

Note that both of Basu '539 and Lu '813 were not cited in the regard.

Therefore, the rejection of claim 18 is in error and should be withdrawn.

b.   Regarding claim 18, on page 12 of Paper No. 20080830, the
Examiner stated:

> "Suda fails to specifically disclose transmitting the
> state information of the access nodes to a public network in
> response to a request for the state information of the access
> nodes by the public network. However, Basu teaches
> transmitting the state information of the access nodes to a
> public network in response to a request for the state
> information of the access nodes by the public network (fig.1
> and 5D, col.13, lines 10-14 and 22-33). Therefore, it would
> have been obvious to one having ordinary skill in the art at
> the time invention was made to apply to teaching of Basu to
> Suda to provide a method for implementing a private
> wireless communication system while still maintaining the
> availability of technology."

Applicant respectfully traverses.

As discussed previously, Basu '539 fails to teach or suggest the pending

claim's "transmitting the state information of the access nodes to a public

network in response to a request by the public network". Basu '539 merely

teaches that home location register (HLR) 108 transmits a connection request to

authorization and call routing equipment (ACRE) 107, and ACRE 107 returns a

transmission line identification number (TLDN) to HLR 108. As defined in Basu

'539, the transmission line identification number (TLDN) includes a public

switched telephone network (PSTN) number identifying the local exchange and a

PB number identifying the home base station. Apparently, Basu '539's

"transmission line identification number (TLDN)" is not synonymous with the

pending claim's "busy/idle state information of the access nodes". And there is

no teaching in Basu '539 suggesting that Basu '539's "connection request"

requests the "busy/idle state information of the access nodes".

Note that both of Suda 518 and Lu '813 were not cited in the regard.

Therefore, the rejection of claim 18 is in error and should be withdrawn.

II-5.   Claim 19

a.   Regarding claim 19, on pages 13-14 of Paper No. 20080830, the

Examiner stated:

> "(Suda teaches) when an access node (fig.1, mobile
> stations 6-1, PHS base stations 2-1) coupled to a wireless
> private network makes a request for a call connection with
> another access node (col.3, lines 11-29) coupled to the
> wireless private network (fig.1, control unit 4, switching
> network 1, col.2, lines 52-58, col.3, lines 11-14), carrying
> out a call connection between the access nodes (col.3, lines
> 11-29) and providing a high-speed (not show) wireless data
> service for the access nodes (abstract, col.1, lines 26-34);
> updating state information of the access nodes to busy
> state information (figA-8d, col.3, lines 1-47); and
> when the high-speed (not show) wireless data service
> for the access nodes is
> completed (col.1, lines 26-34), carrying out a call
> connection release (not show);
> updating the state information of the access nodes to
> idle state information according to the call connection
> release (not show) (figA-8d, col.3, lines 1-47)."

Applicant respectfully traverses.

As discussed previously, Suda '518's "vacant/occupied state information

of the traffic channels" is not synonymous with the claim 19's "busy/idle state

information of the access nodes" because Suda '518's "traffic channel" does not correspond to the "radio terminal". Consequently, Suda '518 fails to teach or suggest the pending claim's "updating the state information of the access nodes to busy state information when a call connection is carried out between the access nodes", and "updating the state information of the access nodes to idle state information when a call connection is released".

Note that both of Basu '539 and Lu '813 were not cited in the regard.

Therefore, the rejection of claim 19 is in error and should be withdrawn.

b. Regarding claim 19, on page 14 of Paper No. 20080830, the Examiner stated:

> "Suda fails to specifically disclose transmitting the state information of the access nodes to a public network in response to a request for the state information of the access nodes by the public network. However, Basu teaches transmitting the state information of the access nodes to a public network in response to a request for the state information of the access nodes by the public network (fig.1 and 5D, col.13, lines 10-14 and 22-33). Therefore, it would have been obvious to one having ordinary skill in the art at the time invention was made to apply to teaching of Basu to Suda to provide a method for implementing a private wireless communication system while still maintaining the availability of technology."

Applicant respectfully traverses.

As discussed previously, Basu '539 fails to teach or suggest the pending claim's "transmitting the state information of the access nodes to a public

network in response to a request by the public network", because Basu '539's "transmission line identification number (TLDN)" is not synonymous with the pending claim's "busy/idle state information of the access nodes", and Basu '539's "connection request" is synonymous with the "request for the busy/idle state information of the access nodes".

Note that both of Suda 518 and Lu '813 were not cited in the regard.

Therefore, the rejection of claim 19 is in error and should be withdrawn.

II-6. Claim 20

a. Regarding claim 20, on pages 15-16 of Paper No. 20080830, the Examiner stated:

> "(Suda teaches) a first field containing data representing when an access node (fig. 1, mobile stations 6-1, PHS base stations 2-1) coupled to a wireless private network makes a request for a call connection with another access node (col.3, lines 11-29) coupled to the wireless private network (fig.1, control unit 4, switching network 1, col.2, lines 52-58, col.3, lines 11-14), allowing a private access network controller to carry out a call connection between the access nodes (col.3, lines 11-29) and to provide a high-speed (not show) wireless data service for the access nodes (abstract, col.1, lines 26-34);
> a second field containing data representing allowing the private access network controller to request that state information of the access nodes be updated (fig. 4-8d, col.3, lines 1-47);
> a third field containing data representing allowing a data location register to update the state information of the access nodes to busy state information according to a state information update request (fig. 4-8d, col.3, lines 1-47);
> a fourth field containing data representing when the high-speed (not show) wireless data service for the access

nodes is completed (col.1, lines 26-34), carrying out a call connection release between the access nodes (not show) and allowing the private access network controller to request that the state information of the access nodes be updated (fig. 4-8d, col.3, lines 1-47); and

a fifth field containing data representing allowing the data location register to update the state information of the access nodes to idle state information according to another state information update request (fig. 4-8d, col.3, lines 1-47)."

Applicant respectfully traverses.

As discussed previously, Suda '518's "vacant/occupied state information of the traffic channels" is not synonymous with the claim 20's "busy/idle state information of the access nodes" because Suda '518's "traffic channel" does not correspond to the "radio terminal". Consequently, Suda '518 fails to teach or suggest the pending claim's "the private access network controller request to update the state information of the access nodes to busy state information when a call connection is carried out between the access nodes", and "the private access network controller request to update the state information of the access nodes to idle state information when a call connection is released".

Note that both of Basu '539 and Lu '813 were not cited in the regard.

Therefore, the rejection of claim 20 is in error and should be withdrawn.

b.   Regarding claim 20, on page 16 of Paper No. 20080830, the Examiner stated:

"Suda fails to specifically disclose a sixth field containing data representing allowing the data location

register to transmit the state information of the access nodes to a public network in response to a request for the state information of the access nodes by the public network. However, Basu teaches a sixth field containing data representing allowing the data location register to transmit the state information of the access nodes to a public network in response to a request for the state information of the access nodes by the public network (fig.1 and 50, col.13, lines 10-14 and 22-33). Therefore, it would have been obvious to one having ordinary skill in the art at the time invention was made to apply to teaching of Basu to Suda to provide a method for implementing a private wireless communication system while still maintaining the availability of technology."

Applicant respectfully traverses.

As discussed previously, Basu '539 fails to teach or suggest the pending claim's "the data location register transmitting the state information of the access nodes to a public network in response to a request by the public network", because Basu '539's "transmission line identification number (TLDN)" is not synonymous with the pending claim's "busy/idle state information of the access nodes", and Basu '539's "connection request" is synonymous with the "request for the busy/idle state information of the access nodes".

Note that both of Suda 518 and Lu '813 were not cited in the regard.
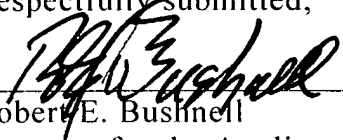
Therefore, the rejection of claim 20 is in error and should be withdrawn.

In view of the foregoing amendments and remarks, all claims are deemed to be allowable and this application is believed to be in condition to be passed to

issue. If there are any questions, the examiner is asked to contact the applicant's

attorney.

No fee is incurred by this Amendment.

Respectfully submitted,

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